

11/24/04- 1318

MEMORANDUM

CH2MHILL

Response to the Virginia Department of Environmental Quality's Comments on the *Draft Step 4 Work Plan, Ecological Risk Assessment, Bousch Creek*

TO: Paul Herman/VDEQ

COPIES: Todd Richardson/USEPA
Winoma Johnson/NAVFAC MIDLANT
Channing Blackwell/CNRMA

FROM: Holly Rosnick/CH2M HILL

DATE: November 24, 2004

This document responds to comments from the Virginia Department of Environmental Quality (letter dated 2 November 2004) on the *Draft Step 4 Work Plan, Ecological Risk Assessment, Bousch Creek, Naval Station Norfolk* (October 2004).

1. Section 2.1: Please, include the date when the 3,900-foot underground culvert was installed. A construction date for the culvert will provide the beginning of a timeline for sediment accumulation in the culvert. Also, information concerning culvert maintenance activities should be included especially if the culvert is periodically cleaned of sediment/debris.

The spatial scope of this ERA, as recommended by the Ecological Subgroup and concurred to by the Tier 1 Partnering Team at the April 2004 partnering meeting, does not include the area encompassed by the 3,900-foot culvert. Thus, information on the construction details and maintenance of the culvert are not directly pertinent to this ERA.

2. Figure 2-1: Outfall 408 is not provided on Figure 2-1. Please, provide the location of this outfall on the figure.

The location of Outfall 408 will be added to Figure 2-1.

3. Section 2.2.3.2, last paragraph: Please, include an additional statement that presents the possibility that tidal action may have scoured contaminated sediments from the lower reaches of Bousch Creek and deposited them into Willoughby Bay. Or, delete the second to last sentence from the last paragraph. The sentence begins, "This suggests that chemicals related..."

The sentence beginning with "This suggests that chemicals related..." will be deleted.

4. Section 3.2, Figure 2-5: Provide a rationale for why reference samples are not being collected from the upper reaches of the forested scrub-shrub/emergent wetland areas.

The sample locations, which were jointly-scoped with a BTAG representative during an August 2004 field visit, include two "secondary" locations (BC-SD04-B and BC-SD04-C) within the referenced wetland. These two samples are isolated from the tidal influences of Bousch Creek. They are intended to provide information on relative fate and transport, from

a spatial and source-related perspective, for key selected constituents and thus would serve to some extent as reference samples in this context.

5. Section 4.3.2.6: In the 5th sentence of the 2nd paragraph, provide a more specific description of the "required tissue mass". Perhaps the sentence could include the following, "to achieve the 'x' to 'y' grams of tissue mass needed for analysis." Insert the appropriate range of tissue mass needed in place of 'x' and 'y'.

The minimum required tissue mass for the analytes listed is 20 grams. However, if large numbers of fish are caught, the laboratory will be provided with several times this minimum mass to provide for any unexpected contingencies. This will be added to the work plan.